

AMENDMENTS TO THE CLAIMS

1. (Currently amended) An actuating member for a railway vehicle brake assembly, the railway vehicle brake assembly having an air ~~bag~~ spring actuator incorporated therein, ~~said the~~ air ~~bag~~ spring actuator having a pair of spaced apart end surfaces and at least one inflatable air bag spring defining an exterior peripheral surface of the air spring actuator, each of the pair of spaced apart end surfaces having a plurality of mounting members extending outwardly therefrom, said actuating member comprising:

(a) a first plate member disposed substantially vertically during use of said brake assembly ~~disposed plate member,~~ said first ~~substantially vertically disposed~~ plate member having a first substantially planar surface ~~abuttingly engageable with a substantially vertically disposed surface thereof disposed in~~ abutting relationship with one of the pair of spaced apart end surfaces of the air ~~bag~~ spring actuator, said first ~~substantially vertically disposed~~ plate member exposing at least ~~a first portion of an~~ the exterior peripheral surface of the at least one inflatable air ~~bag~~ spring to an atmospheric operating environment characterized by a presence of detrimental extraneous foreign material when the railway car mounted brake assembly is in use;

(b) a second plate member disposed substantially horizontally during use of the brake assembly, said second disposed plate member directly attached to said first ~~substantially vertically disposed~~ plate member adjacent at a bottom edge thereof and extending substantially perpendicular to said first substantially planar surface of said first ~~substantially vertically disposed~~ plate member for shielding at least ~~said~~ a first portion of ~~said~~ the exterior peripheral surface of the air ~~bag~~ spring actuator from said detrimental extraneous foreign material; ~~and~~

(c) a structure disposed on and attached to ~~a radially~~ an opposed second surface of said first ~~substantially vertically disposed~~ plate member for securing said actuating member to an actuating linkage of the railway vehicle brake assembly;

(d) a plurality of mounting apertures formed through a thickness of said first plate member, each of said plurality of mounting apertures operatively aligned with and sized to pass therethrough a respective one of the plurality of mounting members extending outwardly from the one of the pair of end surfaces; and

(e) a pair of plate portions disposed planar with said first plate member adjacent a top edge thereof, each of said pair of plate portions protruding outwardly from a respective side edge of said first plate member.

2. (Currently amended) An actuating member, according to claim 1, wherein said actuating member further includes a ~~first~~ third plate member connected to an upper surface of said ~~substantially horizontally disposed~~ second plate member and to said first planar surface of said first ~~substantially vertically disposed~~ plate member adjacent a first side edge thereof and extending substantially perpendicular to at least said ~~substantially horizontally disposed~~ first plate member for shielding at least a second portion of the exterior peripheral surface of the air ~~bag~~ spring actuator from said detrimental extraneous foreign material and for providing added strength between said first ~~substantially vertically disposed~~ plate member and said ~~substantially horizontally disposed~~ second plate member.

3. (Canceled).

4. (Canceled).

5. (Currently amended) An actuating member, according to claim 1, wherein said structure attached to said ~~radially~~ opposed second surface of said ~~substantially~~ first ~~vertically disposed~~ plate member for securing said actuating member to the

actuating linkage of the railway vehicle brake assembly includes at least one plate member having an aperture formed therethrough and a pin member disposed in said aperture for securing said at least one plate member to the actuating linkage.

6. (Currently Amended) ~~An apparatus~~ A mounting member for mounting an air ~~bag~~ spring actuator to at least one brake beam of a railway car mounted brake assembly, ~~said the air bag spring~~ actuator having a pair of spaced apart end surfaces and at least one inflatable air bag spring defining an exterior peripheral surface of the air spring actuator, each of the pair of spaced apart end surfaces having a plurality of mounting members extending outwardly therefrom, said apparatus mounting member comprising:

(a) ~~a first plate member disposed~~ substantially vertically during use of the brake assembly, ~~said disposed~~ plate member having a first substantially planar surface portion thereof abuttingly engageable with a substantially vertically disposed surface disposed in abutting relationship with one of the pair of spaced apart end surfaces of the air bag spring actuator, said plate member further having a plurality of mounting apertures formed through a thickness thereof, each of said plurality of mounting apertures aligned with and sized to pass therethrough a respective one of the plurality of mounting

members extending outwardly from the one of the pair of end surfaces, said ~~first substantially vertically disposed~~ plate member exposing ~~at least a first portion of an~~ the exterior peripheral surface of the at least one inflatable air ~~bag~~ spring to an atmospheric operating environment characterized by a presence of detrimental extraneous foreign material when the railway car mounted brake assembly is in use;

(b) a ~~guide member directly connected to and disposed closely adjacent a first outer edge of and substantially perpendicular to said planar surface portion of said first substantially vertically disposed plate member for guiding and alignment during reciprocal motion of the air bag actuator pair~~ of elongated members, each of said pair of elongated members having a proximal end thereof disposed on and attached to said plate member adjacent one side edge of said plate member, said each of said pair of elongated members extending outwardly from said first substantially planar surface of said plate member to cover a portion of the peripheral surface of the air spring actuator; and

(c) a structure disposed on and attached to an opposed substantially planar surface of said plate member, said structure attaching said mounting member ~~enabling attachment of said apparatus~~ to a rigid structure.

7. (Canceled).

8. (Canceled).

9. (Currently amended) An air ~~spring~~ brake actuator assembly, said ~~spring~~ air brake actuator assembly comprising:

(a) at least one air ~~bag~~ spring actuator having ~~at least a first portion of a pair of spaced apart end surfaces and an exterior peripheral surface, each of said pair of spaced apart end surfaces having a plurality of mounting members extending outwardly therefrom, wherein said exterior peripheral surface~~ exposed to an atmospheric operating environment characterized by a presence of detrimental extraneous foreign material during use of said air spring actuator assembly;

(b) a first plate member disposed substantially vertically during use of said air brake actuator assembly ~~disposed plate member, said first substantially vertically disposed plate member having a first substantially planar surface thereof abuttingly engageable with an outer surface of one substantially vertically disposed plate member attached to~~ disposed in abutting relationship with one of said pair of spaced apart end surfaces of said at least one air bag spring actuator, said first plate member further having a plurality of first mounting apertures formed through a thickness thereof, each of said

plurality of first mounting apertures aligned with and sized to pass therethrough a respective one of said plurality of mounting members extending outwardly from said one of said pair of spaced apart end surfaces;

(c) a second plate member disposed substantially horizontally during use of said air brake actuator assembly, ~~disposed~~ said second plate member directly attached to said first ~~substantially vertically disposed~~ plate member ~~adjacent~~ at a bottom edge thereof and extending substantially perpendicular to said first substantially planar surface of said first ~~substantially vertically disposed~~ plate member for shielding ~~said~~ at least ~~said~~ a first portion of said exterior peripheral surface of said at least one air ~~bag~~ spring actuator from said detrimental extraneous foreign material;

(d) a first structure securing said first substantially vertically disposed plate member to an actuating linkage of a railway vehicle brake assembly;

(e) a ~~second~~ third plate member disposed substantially vertically during use of said air brake actuator assembly, said third ~~disposed~~ plate member having a ~~second~~ first planar surface portion thereof ~~abuttingly engageable with an outer surface of one substantially vertically disposed plate member attached to~~ disposed in abutting relationship with an opposed one of said pair of spaced apart end surfaces of said at least one air ~~bag~~

spring actuator, said third plate member further having a plurality of second mounting apertures formed through a thickness thereof, each of said plurality of second mounting apertures aligned with and sized to pass therethrough a respective one of said plurality of mounting members extending outwardly from said opposed one of said pair of end surfaces;

~~(f) a guide member connected to and disposed closely adjacent a first outer edge of and substantially perpendicular to at least one of said first substantially planar surface and said second planar surface portion of a respective one of said first and said second substantially vertically disposed plate members for guiding and alignment during reciprocal motion of the air bag spring; and~~

[[(g)]] (f) a second structure disposed on an opposed substantially planar surface of said third plate member and attaching said air spring actuator assembly to a rigid structure;

(g) a pair of plate portions disposed planar with said first plate member adjacent a top edge thereof, each of said pair of plate portions protruding outwardly from a respective side edge of said first plate member;

(h) a pair of elongated members, each of said pair of elongated members having a proximal end thereof disposed on and attached to said third plate member adjacent one side edge

thereof, said each of said pair of elongated members extending outwardly from said first substantially planar surface of said third plate member in a direction toward said first plate member; and

(i) abutment between a top edge of each of said pair of elongated members with an edge of a respective one of said pair of plate portions during motion of said at least one air spring actuator.

10. (Currently amended) An air ~~spring~~ brake actuator assembly, according to claim 9, wherein said first structure includes a pair of elongated members disposed substantially horizontally and spaced apart in a vertical plane during use of said air brake assembly, each of said pair of spaced apart elongated members having a proximal end thereof disposed on and attached to an opposed substantially planar surface of said first ~~substantially vertically disposed~~ plate member, a distal end thereof extending outwardly and substantially perpendicular to said first ~~substantially vertically disposed~~ plate member, and an aperture formed through a thickness of said each of said pair of elongated members adjacent to and spaced from said distal end thereof.

11. (Currently amended) An air ~~spring~~ brake actuator assembly, according to claim 9, wherein said air ~~spring-actuator~~ brake assembly further includes structure disposed therein for limiting reciprocal motion of said at least one air spring actuator during evacuation of air pressure from said at least one air ~~bag~~ spring actuator.

12. (Currently amended) An air ~~spring~~ brake actuator assembly, according to claim 11, wherein said structure for limiting reciprocal motion of said ~~brake~~ at least one air spring actuator is a rigid member disposed internally therewithin ~~said~~ ~~air spring-actuator~~.

13. (Currently amended) An air ~~spring~~ brake actuator assembly, according to claim 9, wherein said air spring actuator further includes an air inlet in communication with said at least one air ~~bag~~ spring actuator.

14. (Canceled)

15. (Canceled).

16. (Currently Amended) An air ~~spring~~ brake actuator assembly, according to claim 9, wherein said air spring actuator

further includes a member for visual determination of a travel length of said air spring actuator.

17. (Currently amended) An air ~~spring~~ brake actuator assembly, according to claim 16, wherein said visual travel determination member is a linear measuring device.

18. (Currently amended) An air ~~spring~~ brake actuator assembly, according to claim 9, wherein said air ~~spring~~ brake actuator assembly further includes structure disposed therein for controlling volume of air in said at least one air ~~bag~~ spring actuator.

19. (Canceled).

20. (Canceled).

21. (Canceled).

22. (Canceled).

23. (New) A mounting member, according to claim 6, wherein said structure includes a flange disposed, in a substantially horizontal plane during use of said air spring actuator

assembly, on and extending outwardly from said opposed substantially planar surface of said plate member and a pair of apertures formed through a thickness of said flange in a spaced apart relationship along a length of said flange.

24. (New) A mounting member, according to claim 6, wherein said mounting member includes a support extending outwardly from one side edge of said plate member and having a portion thereof disposed generally horizontally when said mounting member is installed on the railway car mounted brake assembly, a tab extending downwardly from a bottom surface of said portion and an aperture formed through a thickness of said tab.

25. (New) A mounting member, according to claim 6, wherein a portion of at least one of said pair of elongated members carrying said proximal end thereof has a greater width.

26. (New) In combination with a railway car brake assembly, an air brake actuator assembly comprising:

(a) at least one air spring actuator having a pair of spaced apart end surfaces and an exterior peripheral surface, each of said pair of spaced apart end surfaces having a plurality of mounting members extending outwardly therefrom, wherein said exterior peripheral surface exposed to an

atmospheric operating environment characterized by a presence of detrimental extraneous foreign material during use of said air spring actuator assembly;

(b) a first plate member disposed substantially vertically during use of said air brake actuator assembly, said first plate member having a first substantially planar surface thereof disposed in abutting relationship with one of said pair of spaced apart end surfaces of said at least one air spring actuator, said first plate member further having a plurality of first mounting apertures formed through a thickness thereof, each of said plurality of first mounting apertures aligned with and sized to pass therethrough a respective one of said plurality of mounting members extending outwardly from said one of said pair of spaced apart end surfaces;

(c) a second plate member disposed substantially horizontally during use of said air brake actuator assembly, said second plate member directly attached to said first plate member at a bottom edge thereof and extending substantially perpendicular to said first substantially planar surface of said first plate member for shielding a bottom portion of said exterior peripheral surface of said at least one air spring actuator from said detrimental extraneous foreign material;

(d) a pair of elongated connecting members disposed substantially horizontally and spaced apart in a vertical plane

during use of said air brake actuator assembly, each of said pair of spaced apart elongated connecting members having a proximal end thereof disposed on and attached to an opposed substantially planar surface of said first plate member, a distal end thereof extending outwardly and substantially perpendicular to said first plate member, and a pair of apertures, each of said pair of apertures formed in operative alignment through a thickness of a respective one of said pair of elongated connecting members adjacent to and spaced from said distal end thereof;

(e) a third plate member disposed substantially vertically during use of said air brake actuator assembly, said third plate member having a first planar surface portion thereof disposed in abutting relationship with an opposed one of said pair of spaced apart end surfaces of said at least one air spring actuator, said third plate member further having a plurality of second mounting apertures formed through a thickness thereof, each of said plurality of second mounting apertures aligned with and sized to pass therethrough a respective one of said plurality of mounting members extending outwardly from said opposed one of said pair of end surfaces;

(f) a flange disposed, in a substantially horizontal plane during use of said air brake actuator assembly, on and extending

outwardly from said opposed substantially planar surface of said third plate member;

(g) a pair of apertures formed through a thickness of said flange in a spaced apart relationship along a length of said flange;

(h) a support extending outwardly from one side edge of said third plate member and having a portion thereof disposed generally horizontally during use of said at least one air spring actuator assembly;

(i) a tab extending downwardly from a bottom surface of said portion of said support;

(j) an aperture formed through a thickness of said tab;

(k) an aperture formed through a thickness of said third plate member in operative alignment with an inlet port of said at least one air spring actuator;

(l) a pair of plate portions disposed planar with said first plate member adjacent a top edge thereof, each of said pair of plate portions protruding outwardly from a respective side edge of said first plate member;

(m) a pair of elongated members, each of said pair of elongated members having a proximal end thereof disposed on and attached to said third plate member adjacent one side edge thereof, said each of said pair of elongated members extending outwardly from said first substantially planar surface of said

third plate member in a direction toward said first plate member to cover a portion of the peripheral surface of said at least one air spring actuator;

(n) engagement between a top edge of each of said pair of elongated members with an edge of a respective one of said pair of plate portions during use of said at least one air brake actuator assembly;

(o) a plate portion extending from a top edge of one of said one of said pair of elongated members and defining an edge disposed generally perpendicular to said top edge of said one of said pair of elongated members; and

(p) abutment of said edge of said plate portion extending from said top edge of said one of said pair of elongated members with said first substantially planar surface of said first plate member to limit motion of said at least one air spring actuator.

27. (New) The air brake actuator assembly, according to claim 26, wherein said top edge of said each of said pair of elongated members includes a wear resistant member, wherein a surface of said wear resistant member engages said edge of said respective one of said pair of plate portions during use of said air brake actuator assembly.

28. (New) The air brake actuator assembly, according to claim 26, wherein each of said pair of elongated members includes a flange extending inwardly from said top edge thereof, wherein a top surface of said flange engages said edge of said respective one of said pair of plate portions during use of said air brake actuator assembly.